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Hydrothermal synthesis; Lithium batteries (Dokko, K. (165) 656)

Light-to-electricity conversion efficiency
Dye-sensitized solar cell; Polymer gel electrolyte; Ionic liquid (Li, F. (165) 911)

Li-ion batteries
Rapid recharging; Microbatteries; Li_2RuO_3 ; $\text{Li}_4\text{Ti}_5\text{O}_{12}$; High rate (Stux, A.M. (165) 635)

Li-ion battery
Olivine cathode material (Howard, W.F. (165) 887)

Li-ion microbattery
Thick-film electrodes; Laser direct-write; Gel polymer electrolyte (Kim, H. (165) 413)

Linear control
Identification; Ratio control; PEMFC (Methkar, R.N. (165) 152)

Linear elasticity
Active/inactive nanocomposites; Critical energy release rate (Aifantis, K.E. (165) 874)

LiPF_6 doping
Hybrid power source; Lithium secondary battery; Redox supercapacitor; Polyaniline electrode (Ryu, K.S. (165) 420)

Liquid catalysis
Hydrogen storage; Sodium borohydride; Crystallization (Zhang, J. (165) 844)

Liquid hydrocarbons
Diesel; Vaporization; Combustion; Partial oxidation; ICE exhaust gas treatment (Aicher, T. (165) 210)

Liquid surface tension
Direct methanol fuel cell; Passive fuel delivery (Yang, Y. (165) 185)

Lithium
Carbon; Graphite; Thermodynamics; Entropy (Reynier, Y. (165) 552)

Lithium
Ion; Battery; Charge; Rate (Park, C.-K. (165) 892)

Lithium batteries
Hydrothermal synthesis; LiFePO_4 (Dokko, K. (165) 656)

Lithium batteries
 Polymer electrolytes; Ionic conductivity; Siloxane cross-linker; Phase separation (Kang, Y. (165) 92)

Lithium battery
 Composite electrode; Alpha-MnO₂; Manganese oxide; Li₂MnO₃ (Johnson, C.S. (165) 559)

Lithium battery
 Manganese dioxide; Ion exchange; Cation vacancy; SPECS; MAS NMR (Bowden, W. (165) 609)

Lithium battery
 Neutron diffraction; Rietveld analysis; Magnetism; Ordering (Ma, M. (165) 517)

Lithium battery
 Organic radical battery; Stable radical; PTMA (Nakahara, K. (165) 398)

Lithium battery
 Orthorhombic lithium manganese oxide; Pechini method; Cathode material (Wu, S.-h. (165) 660)

Lithium battery electrode
 Iron oxide; Spinel-rocksalt transformation; Nano particle (Kanzaki, S. (165) 403)

Lithium cobalt oxide electrode (LiCoO₂)
 Numerical simulation; Symmetry factor (Zhang, Q. (165) 427)

Lithium ion battery
 Anode materials; Spinel-type; Li₄Ti₅O₁₂ (Huang, S. (165) 408)

Lithium iron phosphate
 Cathode material; Vanadium (Yang, M.-R. (165) 646)

Lithium manganate
 Nanoparticles; Electrical conductivity; Crystallite size; Lithium-ion battery; Transition metal doping (Iqbal, M.J. (165) 393)

Lithium metal secondary cell
 Lithium powder; Dissolution and deposition behavior; Morphological change (Kim, J.S. (165) 620)

Lithium powder
 Lithium metal secondary cell; Dissolution and deposition behavior; Morphological change (Kim, J.S. (165) 620)

Lithium rechargeable battery
 Organic radical battery; Stable radical; PTMA (Nakahara, K. (165) 870)

Lithium secondary battery
 Hybrid power source; Redox supercapacitor; Polyaniline electrode; LiPF₆ doping (Ryu, K.S. (165) 420)

Lithium titanate spinel
 Lithium-ion batteries; Atomic layer deposition; Diffuse reflectance infrared Fourier transform (DRIFT) spectroscopy; Voltage profile; Charge capacity (Snyder, M.Q. (165) 379)

Lithium-ion batteries
 Lithium titanate spinel; Atomic layer deposition; Diffuse reflectance infrared Fourier transform (DRIFT) spectroscopy; Voltage profile; Charge capacity (Snyder, M.Q. (165) 379)

Lithium-ion battery
 Lithium manganate; Nanoparticles; Electrical conductivity; Crystallite size; Transition metal doping (Iqbal, M.J. (165) 393)

Lithium-ion battery
 Natural graphite; Silicon–carbon–graphite composite anodes; PURE-BLACK® Carbon; Expanded graphite (Khomenko, V.G. (165) 598)

Lithium-ion battery
 Spinel; Cation ordering; Rate capability; Oxygen-partial-pressure (Kunduraci, M. (165) 359)

Low platinum loadings
 Proton exchange membrane fuel cell; Platinum electrocatalysts; Thin film method; Sputter deposition; Electrodeposition (Wee, J.-H. (165) 667)

Low temperature Li-ion electrolytes
 Gel polymer Li-ion cells (Smart, M.C. (165) 535)

Low temperature synthesis
 Solid oxide fuel cell; Thin film; Ce_{0.8}Sm_{0.2}O_{2-δ}; Polyvinyl alcohol (Jiang, C. (165) 134)

Low-cost
 Self-humidifying membrane; Proton exchange membrane fuel cell; PTFE-reinforcement; Degradation (Zhang, Y. (165) 786)

Magnetism
 Neutron diffraction; Lithium battery; Rietveld analysis; Ordering (Ma, M. (165) 517)

Manganese dioxide
 Lithium battery; Ion exchange; Cation vacancy; SPECS; MAS NMR (Bowden, W. (165) 609)

Manganese dioxide
 Supercapacitors; Electrochemical capacitors (Macheaux, E. (165) 651)

Manganese dioxides
 Aluminum substitution; Nanowires; Li batteries (Macheaux, E. (165) 625)

Manganese dissolution
 Manganese oxides; Cathode materials; Storage at 55 °C (Park, Y.J. (165) 573)

Manganese oxide
 Lithium battery; Composite electrode; Alpha-MnO₂; Li₂MnO₃ (Johnson, C.S. (165) 559)

Manganese oxides
 Cathode materials; Storage at 55 °C; Manganese dissolution (Park, Y.J. (165) 573)

Manufacturing
 Combined heat and power (CHP); Molten carbonate fuel cells; FuelCell Energy (Hengeveld, D.W. (165) 300)

MAS NMR
 Manganese dioxide; Lithium battery; Ion exchange; Cation vacancy; SPECS (Bowden, W. (165) 609)

MEA
 Degradation; Reverse voltage; Hydrogen pump; PEMFC (Wang, H. (165) 287)

Mechanical alloying
 Si/C/HC nanocomposite; Anode; Li ion battery (Datta, M.K. (165) 368)

Mechanism
 PEM fuel cells; Contamination; Modeling; Pt catalyst poisoning; Fuel impurities and air pollutants (Cheng, X. (165) 739)

Mediated
 Microbial fuel cell (MFC); Aerobic; Anaerobic; Miniature microbial fuel cell (mini-MFC); *Shewanella oneidensis* (Ringisen, B.R. (165) 591)

Membrane
 Polymer electrolyte fuel cells; Cold start; Ice formation; Catalyst layer (Tajiri, K. (165) 279)

Membrane
 Proton exchange membrane; Polyaromatics; Electrolyte (Chen, H.G. (165) 16)

Membrane electrode assemblies
 Direct methanol fuel cell; Hot pressing; Electrochemical impedance spectra (Zhang, J. (165) 73)

Membrane electrode assembly
 Direct methanol fuel cell; Nafion® solution; Aggregation behavior (Wang, S. (165) 128)

Membrane electrode assembly
 Fuel cell; Montmorillonite; Poly(oxypropylene); X-ray (Lin, Y.-F. (165) 692)

Memory effect
 Nickel electrode; Second discharge plateau; HNi₂O₃ (Huggins, R.A. (165) 640)

Mesoporous material
 Photocatalysis; Hydrogen evolution; Pt/TiO₂; Single-step sol-gel; Surfactant template (Sreethawong, T. (165) 861)

Metal foam
 Direct methanol fuel cells; Gas diffusion layer; Bipolar plates; Multifunctional; Composites (Arisetty, S. (165) 49)

Metal grid
 Dye-sensitized; Solar cell module; Screen-printing; Efficiency; Embedded silver grid (Ramasamy, E. (165) 446)

Metal hydride
 NiMH; Nickel-metal hydride; Nickel hydroxide; Electrochemical catalysis; Engineered surface oxide (Fetcenko, M.A. (165) 544)

Methane
 CO₂ reforming; KH zeolite; Nickel; Sol-gel process (Kaengsilalai, A. (165) 347)

Methane
 Solid oxide fuel cells; LaNi–YSZ anode (Tu, B. (165) 120)

Methane
 Solid oxide fuel cells; Reaction; Anode (You, H. (165) 722)

Methane oxidation
 Solid oxide fuel cell; Perovskite; Anode; Stability; Electrochemical performance (Chen, X.J. (165) 34)

Methanol
 Citrate/nitrate combustion technique; Carbon; Anode catalyst (Xu, S. (165) 82)

Methanol crossover
 Passive DMFC; Porous plate; Methanol supply mode; Oxygen supply mode; Water flux (Abdelkareem, M.A. (165) 685)

Methanol electrooxidation
 Direct methanol fuel cell; Electrochemical impedance; Pt–Ru–Ni/C catalyst; Pt–Ru/C catalyst (Wang, Z.-B. (165) 9)

Methanol supply mode
 Passive DMFC; Porous plate; Oxygen supply mode; Methanol crossover; Water flux (Abdelkareem, M.A. (165) 685)

Methanol tolerance
 Chalcogenide; Iridium; Selenium; Electrocatalyst(s); Oxygen reduction reaction (Lee, K. (165) 108)

Mg
 WGS; Fuel cell; Pt/CeO₂; DRIFTS (Duarte de Farias, A.M. (165) 854)

Microbatteries
 Rapid recharging; Li-ion batteries; Li₂RuO₃; Li₄Ti₅O₁₂; High rate (Stux, A.M. (165) 635)

Microbial fuel cell (MFC)
 Mediated; Aerobic; Anaerobic; Miniature microbial fuel cell (mini-MFC); *Shewanella oneidensis* (Ringisen, B.R. (165) 591)

Micro-combustion
 Micropower device; Thermophotovoltaic; Micro-combustor (Chia, L.C. (165) 455)

Micro-combustor
 Micropower device; Micro-combustion; Thermophotovoltaic (Chia, L.C. (165) 455)

Microfabrication
 Alkaline; Nickel–hydrogen batteries; Thick film printing (Tam, W.G. (165) 481)

Microporous carbon
 Supercapacitor; Ionic liquids; Activated carbon (Balducci, A. (165) 922)

Micropower device
 Micro-combustion; Thermophotovoltaic; Micro-combustor (Chia, L.C. (165) 455)

Microstructure
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Miniature microbial fuel cell (mini-MFC)
 Microbial fuel cell (MFC); Mediated; Aerobic; Anaerobic; *Shewanella oneidensis* (Ringisen, B.R. (165) 591)

Minimum Gibbs free energy method
 Planar solid oxide fuel cell; Control-oriented dynamic model (Xi, H. (165) 253)

MnO₂
 Borazane; Electrooxidation; Ag; Fuel cell; Alternative fuel (Yao, C. (165) 125)

Model
 Direct methanol fuel cell; Dynamic; Electrode kinetics; Adsorption; Crossover (Schultz, T. (165) 138)

Modeling
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Modeling
 PEM fuel cells; Contamination; Mechanism; Pt catalyst poisoning; Fuel impurities and air pollutants (Cheng, X. (165) 739)

Modeling
 Solid oxide fuel cell; Composite electrode; Optimization (Ji, Y. (165) 774)

Molten carbonate fuel cells
 Combined heat and power (CHP); Manufacturing; FuelCell Energy (Hengeveld, D.W. (165) 300)

Montmorillonite
 Fuel cell; Poly(oxypropylene); X-ray; Membrane electrode assembly (Lin, Y.-F. (165) 692)

Montmorillonite
 Polymer membranes; Composites; Nafion; Film coating; Solvent effect; Toughness; Viscosity; DMFC (Kim, T.K. (165) 1)

Morphological change
 Lithium metal secondary cell; Lithium powder; Dissolution and deposition behavior (Kim, J.S. (165) 620)

Morphology
 Proton exchange membrane; SAXS; SPEEK (Li, X. (165) 701)

Multifunctional
 Direct methanol fuel cells; Metal foam; Gas diffusion layer; Bipolar plates; Composites (Arisetty, S. (165) 49)

Nafion
 Fuel cells; Plasma modification (Ramdutt, D. (165) 41)

Nafion
 Polymer electrolyte fuel cells; Platinum/zeolite; Self-humidification; Composite membrane (Son, D.-H. (165) 733)

Nafion
 Polymer membranes; Composites; Montmorillonite; Film coating; Solvent effect; Toughness; Viscosity; DMFC (Kim, T.K. (165) 1)

Nafion® solution
 Direct methanol fuel cell; Aggregation behavior; Membrane electrode assembly (Wang, S. (165) 128)

Nano particle
 Iron oxide; Lithium battery electrode; Spinel-rocksalt transformation (Kanzaki, S. (165) 403)

Nano-crystalline powder
 (Ba_{0.5}Sr_{0.5})Co_{0.8}Fe_{0.2}O_{3-δ}; Sol-gel thermolysis process; IT-SOFC cathode material (Subramania, A. (165) 728)

Nanoparticles
 Lithium manganate; Electrical conductivity; Crystallite size; Lithium–ion battery; Transition metal doping (Iqbal, M.J. (165) 393)

Nanoporous metals
 Fuel cells; Ultra-low loading Pt catalyst (Zeis, R. (165) 65)

Nano-synthesis
 Combinatorial; Alloy; Electrocatalyst; Oxygen reduction (He, T. (165) 87)

Nanowires
 Manganese dioxides; Aluminum substitution; Li batteries (Machefaux, E. (165) 625)

Natural gas
 Fuel processor; Polymer electrolyte membrane fuel cell; Hydrogen; Residential system (Lee, D. (165) 337)

Natural graphite
 Lithium-ion battery; Silicon–carbon–graphite composite anodes; PURE-BLACK® Carbon; Expanded graphite (Khomenko, V.G. (165) 598)

Neutron diffraction
 Lithium battery; Rietveld analysis; Magnetism; Ordering (Ma, M. (165) 517)

Nickel
 CO₂ reforming; Methane; KH zeolite; Sol-gel process (Kaengsilalai, A. (165) 347)

Nickel electrode
 Memory effect; Second discharge plateau; HNi₂O₃ (Huggins, R.A. (165) 640)

Nickel hydroxide
 NiMH; Nickel-metal hydride; Metal hydride; Electrochemical catalysis; Engineered surface oxide (Fetcenko, M.A. (165) 544)

Nickel–hydrogen batteries
 Alkaline; Microfabrication; Thick film printing (Tam, W.G. (165) 481)

Nickel–metal hydride
 NiMH; Nickel hydroxide; Metal hydride; Electrochemical catalysis; Engineered surface oxide (Fetcenko, M.A. (165) 544)

NiMH
 Nickel-metal hydride; Nickel hydroxide; Metal hydride; Electrochemical catalysis; Engineered surface oxide (Fetcenko, M.A. (165) 544)

NiO

Ni–YSZ anode; Ohmic resistance; Reoxidation; Reduction (Liu, B. (165) 114)

Ni–YSZ anode

Ohmic resistance; Reoxidation; Reduction; NiO (Liu, B. (165) 114)

Non-precious metal electrocatalysts

CoTMPP; Proton exchange membrane fuel cell; Plasma treatment (Savastenko, N.A. (165) 24)

Numerical simulation

Lithium cobalt oxide electrode (LiCoO_2); Symmetry factor (Zhang, Q. (165) 427)

Ohmic resistance

Ni–YSZ anode; Reoxidation; Reduction; NiO (Liu, B. (165) 114)

Oligomeric polyether

Polymer electrolyte; Zinc ion conductor; Zinc electrochemistry; Organic carbonate (Ye, H. (165) 500)

Olivine cathode material

Li-ion battery (Howard, W.F. (165) 887)

Optimization

PEM fuel cell; Geometric design; SCGM (Cheng, C.-H. (165) 803)

Optimization

Solid oxide fuel cell; Composite electrode; Modeling (Ji, Y. (165) 774)

Ordering

Neutron diffraction; Lithium battery; Rietveld analysis; Magnetism (Ma, M. (165) 517)

Organic carbonate

Polymer electrolyte; Zinc ion conductor; Zinc electrochemistry; Oligomeric polyether (Ye, H. (165) 500)

Organic radical battery

Lithium battery; Stable radical; PTMA (Nakahara, K. (165) 398)

Organic radical battery

Lithium rechargeable battery; Stable radical; PTMA (Nakahara, K. (165) 870)

Orthorhombic lithium manganese oxide

Pechini method; Lithium battery; Cathode material (Wu, S.-h. (165) 660)

Oxygen reduction

Combinatorial; Nano-synthesis; Alloy; Electrocatalyst (He, T. (165) 87)

Oxygen reduction

Solid oxide fuel cell; Cathode; SSC; Pd (Wang, S. (165) 58)

Oxygen reduction reaction

Chalcogenide; Iridium; Selenium; Electrocatalyst(s); Methanol tolerance (Lee, K. (165) 108)

Oxygen supply mode

Passive DMFC; Porous plate; Methanol supply mode; Methanol crossover; Water flux (Abdelkareem, M.A. (165) 685)

Oxygen-partial-pressure

Lithium-ion battery; Spinel; Cation ordering; Rate capability (Kunduraci, M. (165) 359)

Partial oxidation

Liquid hydrocarbons; Diesel; Vaporization; Combustion; ICE exhaust gas treatment (Aicher, T. (165) 210)

Passive DMFC

Porous plate; Methanol supply mode; Oxygen supply mode; Methanol crossover; Water flux (Abdelkareem, M.A. (165) 685)

Passive fuel delivery

Direct methanol fuel cell; Liquid surface tension (Yang, Y. (165) 185)

Pd

Solid oxide fuel cell; Cathode; SSC; Oxygen reduction (Wang, S. (165) 58)

Peak power capability

Cycle life evaluation; Capacity fade; Incremental capacity analysis; Polarization resistance; Life prediction (Dubarry, M. (165) 566)

Pechini method

Orthorhombic lithium manganese oxide; Lithium battery; Cathode material (Wu, S.-h. (165) 660)

PEM

Energy; Exergy; Efficiency; Vehicle; Performance (Mert, S.O. (165) 244)

PEM fuel cell

Optimization; Geometric design; SCGM (Cheng, C.-H. (165) 803)

PEM fuel cells

Contamination; Mechanism; Modeling; Pt catalyst poisoning; Fuel impurities and air pollutants (Cheng, X. (165) 739)

PEMFC

Degradation; Reverse voltage; MEA; Hydrogen pump (Wang, H. (165) 287)

PEMFC

H_2S poisoning; Recovery (Shi, W. (165) 814)

PEMFC

Identification; Linear control; Ratio control (Methkar, R.N. (165) 152)

PEMFC

Stack; Dynamics; Temperature distribution (Shan, Y. (165) 196)

PEMFCs

Transient; Water transport; Heat transfer (Wu, H. (165) 232)

Performance

Energy; Exergy; Efficiency; PEM; Vehicle (Mert, S.O. (165) 244)

Perovskite

Solid oxide fuel cell; Methane oxidation; Anode; Stability; Electrochemical performance (Chen, X.J. (165) 34)

Perovskite oxide

Intermediate-temperature solid oxide fuel cell; $\text{Sm}_{0.2}\text{Ce}_{0.8}\text{O}_{1.9}$; Cathode material; AC-impedance (Li, S. (165) 97)

PF resin

Graphite; Hot-pressure molding; Fuel cell; Bipolar plate (Yin, Q. (165) 717)

Phase separation

Polymer electrolytes; Lithium batteries; Ionic conductivity; Siloxane cross-linker (Kang, Y. (165) 92)

Photocatalysis

Hydrogen evolution; Pt/TiO_2 ; Single-step sol–gel; Surfactant template; Mesoporous material (Sreethawong, T. (165) 861)

Planar solid oxide fuel cell

Control-oriented dynamic model; Minimum Gibbs free energy method (Xi, H. (165) 253)

Plasma modification

Fuel cells; Nafion (Ramdutt, D. (165) 41)

Plasma treatment

CoTMPP; Non-precious metal electrocatalysts; Proton exchange membrane fuel cell (Savastenko, N.A. (165) 24)

Platinum electrocatalysts

Proton exchange membrane fuel cell; Low platinum loadings; Thin film method; Sputter deposition; Electrodeposition (Wee, J.-H. (165) 667)

Platinum/zeolite

Polymer electrolyte fuel cells; Self-humidification; Nafion; Composite membrane (Son, D.-H. (165) 733)

Polarization resistance

Cycle life evaluation; Capacity fade; Peak power capability; Incremental capacity analysis; Life prediction (Dubarry, M. (165) 566)

Polarization resistance

Solid oxide fuel cell; Alloy; Anode (Lu, X.C. (165) 678)

Poly(ethylene oxide) polymer electrolyte

Sodium battery; Sulfur electrode; Solid-state battery; Capacity; Charge-discharge cycling (Park, C.-W. (165) 450)

Polyaniline electrode

Hybrid power source; Lithium secondary battery; Redox supercapacitor; LiPF_6 doping (Ryu, K.S. (165) 420)

Polyaromatics

Proton exchange membrane; Electrolyte; Membrane (Chen, H.G. (165) 16)

Polymer electrolyte

Zinc ion conductor; Zinc electrochemistry; Oligomeric polyether; Organic carbonate (Ye, H. (165) 500)

Polymer electrolyte fuel cells

Cold start; Ice formation; Catalyst layer; Membrane (Tajiri, K. (165) 279)

Polymer electrolyte fuel cells

Platinum/zeolite; Self-humidification; Nafion; Composite membrane (Son, D.-H. (165) 733)

Polymer electrolyte membrane
 Fuel cell; Equivalent circuit; Voltage drop; Current interrupt method;
 Fitting (Reggiani, U. (165) 224)

Polymer electrolyte membrane fuel cell
 Fuel processor; Hydrogen; Residential system; Natural gas (Lee, D. (165) 337)

Polymer electrolytes
 Lithium batteries; Ionic conductivity; Siloxane cross-linker; Phase separation (Kang, Y. (165) 92)

Polymer gel electrolyte
 Dye-sensitized solar cell; Ionic liquid; Light-to-electricity conversion efficiency (Li, F. (165) 911)

Polymer membranes
 Composites; Nafion; Montmorillonite; Film coating; Solvent effect; Toughness; Viscosity; DMFC (Kim, T.K. (165) 1)

Polynomial approximation
 Duhamel superposition method; Corrected diffusion length method; Pseudo steady state method (Zhang, Q. (165) 880)

Poly(oxypropylene)
 Fuel cell; Montmorillonite; X-ray; Membrane electrode assembly (Lin, Y.-F. (165) 692)

Polyvinyl alcohol
 Solid oxide fuel cell; Thin film; $\text{Ce}_{0.8}\text{Sm}_{0.2}\text{O}_{2-\delta}$; Low temperature synthesis (Jiang, C. (165) 134)

Porosity
 Electrolytic manganese dioxide; EMD (Arnott, J.B. (165) 581)

Porous plate
 Passive DMFC; Methanol supply mode; Oxygen supply mode; Methanol crossover; Water flux (Abdelkareem, M.A. (165) 685)

Power management
 Fuel cell vehicle; Hybrid vehicle; Design optimization (Kim, M.-J. (165) 819)

Precipitation
 Alkaline batteries; Chemical synthesis (Freitas, M.B.J.G. (165) 916)

Preferential carbon monoxide oxidation
 Bimetallics; Au-Pt catalyst; A-type zeolite; Fuel cell; Selectivity (Naknam, P. (165) 353)

Preferential oxidation reactor
 Reformer; Reformed hydrogen; Fuel cell (Kwon, O.J. (165) 342)

Proton exchange membrane
 Fuel cell; Hydrogen peroxide; Regenerative fuel cell; Sodium borohydride; Space power (Miley, G.H. (165) 509)

Proton exchange membrane
 Morphology; SAXS; SPEEK (Li, X. (165) 701)

Proton exchange membrane
 Polyaromatics; Electrolyte; Membrane (Chen, H.G. (165) 16)

Proton exchange membrane fuel cell
 CoTMPP; Non-precious metal electrocatalysts; Plasma treatment (Savastenko, N.A. (165) 24)

Proton exchange membrane fuel cell
 Gas diffusion layer; Transport property; In-plane permeability; Through-plane permeability (Gurau, V. (165) 793)

Proton exchange membrane fuel cell
 Low platinum loadings; Platinum electrocatalysts; Thin film method; Sputter deposition; Electrodeposition (Wee, J.-H. (165) 667)

Proton exchange membrane fuel cell
 Self-humidifying membrane; PTFE-reinforcement; Low-cost; Degradation (Zhang, Y. (165) 786)

Proton exchange membrane fuel cell
 Transient model; Computation fluid dynamics (Hu, G. (165) 171)

Pseudo steady state method
 Duhamel superposition method; Corrected diffusion length method; Polynomial approximation (Zhang, Q. (165) 880)

Pt catalyst poisoning
 PEM fuel cells; Contamination; Mechanism; Modeling; Fuel impurities and air pollutants (Cheng, X. (165) 739)

Pt/CeO₂
 WGS; Fuel cell; Mg; DRIFTS (Duarte de Farias, A.M. (165) 854)

Pt/TiO₂
 Photocatalysis; Hydrogen evolution; Single-step sol-gel; Surfactant template; Mesoporous material (Sreethawong, T. (165) 861)

PTFE-reinforcement
 Self-humidifying membrane; Proton exchange membrane fuel cell; Low-cost; Degradation (Zhang, Y. (165) 786)

PTMA
 Organic radical battery; Lithium battery; Stable radical (Nakahara, K. (165) 398)

PTMA
 Organic radical battery; Lithium rechargeable battery; Stable radical (Nakahara, K. (165) 870)

Pt-Ru/C catalyst
 Direct methanol fuel cell; Electrochemical impedance; Pt-Ru-Ni/C catalyst; Methanol electrooxidation (Wang, Z.-B. (165) 9)

Pt-Ru-Ni/C catalyst
 Direct methanol fuel cell; Electrochemical impedance; Pt-Ru/C catalyst; Methanol electrooxidation (Wang, Z.-B. (165) 9)

PUREBLACK® Carbon
 Lithium-ion battery; Natural graphite; Silicon–carbon–graphite composite anodes; Expanded graphite (Khomenko, V.G. (165) 598)

PVD
 Bipolar plates; Corrosion; EIS; Coating (Wang, Y. (165) 293)

Rapid recharging
 Microbatteries; Li-ion batteries; Li_2RuO_3 ; $\text{Li}_4\text{Ti}_5\text{O}_{12}$; High rate (Stux, A.M. (165) 635)

Rate
 Lithium; Ion; Battery; Charge (Park, C.-K. (165) 892)

Rate capability
 Lithium-ion battery; Spinel; Cation ordering; Oxygen-partial-pressure (Kunduraci, M. (165) 359)

Ratio control
 Identification; Linear control; PEMFC (Methekar, R.N. (165) 152)

Reaction
 Solid oxide fuel cells; Methane; Anode (You, H. (165) 722)

Recovery
 PEMFC; H_2S poisoning (Shi, W. (165) 814)

Redox supercapacitor
 Hybrid power source; Lithium secondary battery; Polyaniline electrode; LiPF₆ doping (Ryu, K.S. (165) 420)

Reduction
 Ni-YSZ anode; Ohmic resistance; Reoxidation; NiO (Liu, B. (165) 114)

Reformed hydrogen
 Reformer; Preferential oxidation reactor; Fuel cell (Kwon, O.J. (165) 342)

Reformer
 Preferential oxidation reactor; Reformed hydrogen; Fuel cell (Kwon, O.J. (165) 342)

Regenerative fuel cell
 Fuel cell; Hydrogen peroxide; Sodium borohydride; Proton exchange membrane; Space power (Miley, G.H. (165) 509)

Reoxidation
 Ni-YSZ anode; Ohmic resistance; Reduction; NiO (Liu, B. (165) 114)

Residential system
 Fuel processor; Polymer electrolyte membrane fuel cell; Hydrogen; Natural gas (Lee, D. (165) 337)

Reverse voltage
 Degradation; MEA; Hydrogen pump; PEMFC (Wang, H. (165) 287)

Rietveld analysis
 Neutron diffraction; Lithium battery; Magnetism; Ordering (Ma, M. (165) 517)

SAXS
 Proton exchange membrane; Morphology; SPEEK (Li, X. (165) 701)

SCGM
 PEM fuel cell; Optimization; Geometric design (Cheng, C.-H. (165) 803)

Screen-printing
 Dye-sensitized; Solar cell module; Metal grid; Efficiency; Embedded silver grid (Ramasamy, E. (165) 446)

Second discharge plateau
Nickel electrode; Memory effect; HNi_2O_3 (Huggins, R.A. (165) 640)

Selectivity
Preferential carbon monoxide oxidation; Bimetallics; Au-Pt catalyst; A-type zeolite; Fuel cell (Naknam, P. (165) 353)

Selenium
Chalcogenide; Iridium; Electrocatalyst(s); Oxygen reduction reaction; Methanol tolerance (Lee, K. (165) 108)

Self-humidification
Polymer electrolyte fuel cells; Platinum/zeolite; Nafion; Composite (Son, D.-H. (165) 733)

Self-humidifying membrane
Proton exchange membrane fuel cell; PTFE-reinforcement; Low-cost; Degradation (Zhang, Y. (165) 786)

Shewanella oneidensis
Microbial fuel cell (MFC); Mediated; Aerobic; Anaerobic; Miniature microbial fuel cell (mini-MFC) (Ringisen, B.R. (165) 591)

Si/C/HC nanocomposite
Mechanical alloying; Anode; Li ion battery (Datta, M.K. (165) 368)

Silicon–carbon–graphite composite anodes
Lithium-ion battery; Natural graphite; PUREBLACK® Carbon; Expanded graphite (Khomenco, V.G. (165) 598)

Siloxane cross-linker
Polymer electrolytes; Lithium batteries; Ionic conductivity; Phase separation (Kang, Y. (165) 92)

Simulation
Lead-acid batteries; Electrochemical cells; Thermal behavior; Modeling (Esperilla, J.J. (165) 436)

Single-step sol–gel
Photocatalysis; Hydrogen evolution; Pt/TiO₂; Surfactant template; Mesoporous material (Sreethawong, T. (165) 861)

Sm_{0.2}Ce_{0.8}O_{1.9}
Intermediate-temperature solid oxide fuel cell; Cathode material; AC-impedance; Perovskite oxide (Li, S. (165) 97)

Sn_xO₄(OH)₄
ZnO; Surface modification; Zn/Ni secondary cells (Yuan, Y.F. (165) 905)

Sodium battery
Sulfur electrode; Poly (ethylene oxide) polymer electrolyte; Solid-state battery; Capacity; Charge-discharge cycling (Park, C.-W. (165) 450)

Sodium borohydride
Catalyst; Hydrogen generation (Peña-Alonso, R. (165) 315)

Sodium borohydride
Fuel cell; Hydrogen peroxide; Regenerative fuel cell; Proton exchange membrane; Space power (Miley, G.H. (165) 509)

Sodium borohydride
Hydrogen storage; Crystallization; Liquid catalysis (Zhang, J. (165) 844)

SOFCE
Yttria stabilized zirconia (YSZ); Electrolyte; Sub-micrometer grain (Han, M. (165) 757)

Solar cell module
Dye-sensitized; Metal grid; Screen-printing; Efficiency; Embedded silver grid (Ramasamy, E. (165) 446)

Sol-gel process
CO₂ reforming; Methane; KH zeolite; Nickel (Kaengsilalai, A. (165) 347)

Sol-gel thermolysis process
(Ba_{0.5}Sr_{0.5})Co_{0.8}Fe_{0.2}O_{3-δ}; Nano-crystalline powder; IT-SOFC cathode material (Subramania, A. (165) 728)

Solid oxide fuel cell
Alloy; Anode; Polarization resistance (Lu, X.C. (165) 678)

Solid oxide fuel cell
Cathode; SSC; Pd; Oxygen reduction (Wang, S. (165) 58)

Solid oxide fuel cell
Composite electrode; Optimization; Modeling (Ji, Y. (165) 774)

Solid oxide fuel cell
Electrophoretic deposition; Electrolyte film; Ceramic processing (Matsuda, M. (165) 102)

Solid oxide fuel cell
Energy; Exergy; Efficiency; Hydrogen; Gas turbine cycle (Granovskii, M. (165) 307)

Solid oxide fuel cell
Perovskite; Methane oxidation; Anode; Stability; Electrochemical performance (Chen, X.J. (165) 34)

Solid oxide fuel cell
Thin film; Ce_{0.8}Sm_{0.2}O_{2-δ}; Low temperature synthesis; Polyvinyl alcohol (Jiang, C. (165) 134)

Solid oxide fuel cells
Gelcasting; Tubular anode-support; Microstructure (Dong, D. (165) 217)

Solid oxide fuel cells
LaNi–YSZ anode; Methane (Tu, B. (165) 120)

Solid oxide fuel cells
Methane; Reaction; Anode (You, H. (165) 722)

Solid-state battery
Sodium battery; Sulfur electrode; Poly (ethylene oxide) polymer electrolyte; Capacity; Charge-discharge cycling (Park, C.-W. (165) 450)

Solvent effect
Polymer membranes; Composites; Nafion; Montmorillonite; Film coating; Toughness; Viscosity; DMFC (Kim, T.K. (165) 1)

Space power
Fuel cell; Hydrogen peroxide; Regenerative fuel cell; Sodium borohydride; Proton exchange membrane (Miley, G.H. (165) 509)

SPECS
Manganese dioxide; Lithium battery; Ion exchange; Cation vacancy; MAS NMR (Bowden, W. (165) 609)

SPEEK
TMBP; Composite membrane; DMFCs (Fu, T. (165) 708)

SPEEKK
Proton exchange membrane; Morphology; SAXS (Li, X. (165) 701)

Spinel
Lithium-ion battery; Cation ordering; Rate capability; Oxygen-partial-pressure (Kunduraci, M. (165) 359)

Spinel-rocksalt transformation
Iron oxide; Lithium battery electrode; Nano particle (Kanzaki, S. (165) 403)

Spinel-type
Lithium ion battery; Anode materials; Li₄Ti₅O₁₂ (Huang, S. (165) 408)

Sputter deposition
Proton exchange membrane fuel cell; Low platinum loadings; Platinum electrocatalysts; Thin film method; Electrodeposition (Wee, J.-H. (165) 667)

SSC
Solid oxide fuel cell; Cathode; Pd; Oxygen reduction (Wang, S. (165) 58)

Stability
Solid oxide fuel cell; Perovskite; Methane oxidation; Anode; Electrochemical performance (Chen, X.J. (165) 34)

Stable radical
Organic radical battery; Lithium battery; PTMA (Nakahara, K. (165) 398)

Stable radical
Organic radical battery; Lithium rechargeable battery; PTMA (Nakahara, K. (165) 870)

Stack
PEMFC; Dynamics; Temperature distribution (Shan, Y. (165) 196)

Storage at 55 °C
Manganese oxides; Cathode materials; Manganese dissolution (Park, Y.J. (165) 573)

Structural property
V₂O₅; Cation doping; Electrochemical performance (Wei, Y. (165) 386)

Structure
Graphite–lithium; Electrode; In situ XRD; Inhomogeneities (Reynier, Y. (165) 616)

Sub-micrometer grain
SOFC; Yttria stabilized zirconia (YSZ); Electrolyte (Han, M. (165) 757)

Sulfur electrode
Sodium battery; Poly (ethylene oxide) polymer electrolyte; Solid-state battery; Capacity; Charge-discharge cycling (Park, C.-W. (165) 450)

Supercapacitor
 Ionic liquids; Activated carbon; Microporous carbon (Balducci, A. (165) 922)

Supercapacitor dynamic behavior
 Supercapacitor modeling; Supercapacitor thermal characterization (Rafik, F. (165) 928)

Supercapacitor modeling
 Supercapacitor thermal characterization; Supercapacitor dynamic behavior (Rafik, F. (165) 928)

Supercapacitor thermal characterization
 Supercapacitor modeling; Supercapacitor dynamic behavior (Rafik, F. (165) 928)

Supercapacitors
 Manganese dioxide; Electrochemical capacitors (Machefaux, E. (165) 651)

Surface chemistry
 Cathodes; Impedance; Capacity fading; Electrolyte solutions (Aurbach, D. (165) 491)

Surface modification
 ZnO ; $Sn_6O_4(OH)_4$; Zn/Ni secondary cells (Yuan, Y.F. (165) 905)

Surfactant template
 Photocatalysis; Hydrogen evolution; Pt/TiO₂; Single-step sol-gel; Mesoporous material (Sreethawong, T. (165) 861)

Symmetry factor
 Lithium cobalt oxide electrode (LiCoO₂); Numerical simulation (Zhang, Q. (165) 427)

Temperature distribution
 Compressed gas cylinder; Hydrogen refuelling (Dicken, C.J.B. (165) 324)

Temperature distribution
 PEMFC; Stack; Dynamics (Shan, Y. (165) 196)

Thermal behavior
 Lead-acid batteries; Electrochemical cells; Modeling; Simulation (Esperilla, J.J. (165) 436)

Thermodynamics
 Carbon; Graphite; Lithium; Entropy (Reynier, Y. (165) 552)

Thermophotovoltaic
 Micropower device; Micro-combustion; Micro-combustor (Chia, L.C. (165) 455)

Thick film printing
 Alkaline; Nickel–hydrogen batteries; Microfabrication (Tam, W.G. (165) 481)

Thick-film electrodes
 Laser direct-write; Li-ion microbattery; Gel polymer electrolyte (Kim, H. (165) 413)

Thin film
 Solid oxide fuel cell; $Ce_{0.8}Sm_{0.2}O_{2-\delta}$; Low temperature synthesis; Polyvinyl alcohol (Jiang, C. (165) 134)

Thin film method
 Proton exchange membrane fuel cell; Low platinum loadings; Platinum electrocatalysts; Sputter deposition; Electrodeposition (Wee, J.-H. (165) 667)

Through-plane permeability
 Proton exchange membrane fuel cell; Gas diffusion layer; Transport property; In-plane permeability (Gurau, V. (165) 793)

TMBP
 SPEEK; Composite membrane; DMFCs (Fu, T. (165) 708)

Toughness
 Polymer membranes; Composites; Nafion; Montmorillonite; Film coating; Solvent effect; Viscosity; DMFC (Kim, T.K. (165) 1)

Transient
 PEMFCs; Water transport; Heat transfer (Wu, H. (165) 232)

Transient model
 Proton exchange membrane fuel cell; Computation fluid dynamics (Hu, G. (165) 171)

Transition metal doping
 Lithium manganate; Nanoparticles; Electrical conductivity; Crystallite size; Lithium–ion battery (Iqbal, M.J. (165) 393)

Transport property
 Proton exchange membrane fuel cell; Gas diffusion layer; In-plane permeability; Through-plane permeability (Gurau, V. (165) 793)

Tubular anode-support
 Gelcasting; Solid oxide fuel cells; Microstructure (Dong, D. (165) 217)

Ultra-low loading Pt catalyst
 Fuel cells; Nanoporous metals (Zeis, R. (165) 65)

UPS
 Zinc–air; Fuel cell; Zinc regeneration (Smedley, S.I. (165) 897)

V_2O_5
 Cation doping; Structural property; Electrochemical performance (Wei, Y. (165) 386)

Vanadium
 Lithium iron phosphate; Cathode material (Yang, M.-R. (165) 646)

Vaporization
 Liquid hydrocarbons; Diesel; Combustion; Partial oxidation; ICE exhaust gas treatment (Aicher, T. (165) 210)

Vehicle
 Energy; Exergy; Efficiency; PEM; Performance (Mert, S.O. (165) 244)

Viscosity
 Polymer membranes; Composites; Nafion; Montmorillonite; Film coating; Solvent effect; Toughness; DMFC (Kim, T.K. (165) 1)

Voltage drop
 Fuel cell; Polymer electrolyte membrane; Equivalent circuit; Current interrupt method; Fitting (Reggiani, U. (165) 224)

Voltage profile
 Lithium titanate spinel; Lithium-ion batteries; Atomic layer deposition; Diffuse reflectance infrared Fourier transform (DRIFT) spectroscopy; Charge capacity (Snyder, M.Q. (165) 379)

Water flux
 Passive DMFC; Porous plate; Methanol supply mode; Oxygen supply mode; Methanol crossover (Abdelkareem, M.A. (165) 685)

Water transport
 Transient; PEMFCs; Heat transfer (Wu, H. (165) 232)

Wet-lay composite
 Fuel cell; Bipolar plate; Laminate; Graphite composite (Cunningham, B.D. (165) 764)

WGS
 Fuel cell; Mg; Pt/CeO₂; DRIFTS (Duarte de Farias, A.M. (165) 854)

X-ray
 Fuel cell; Montmorillonite; Poly(oxypropylene); Membrane electrode assembly (Lin, Y.-F. (165) 692)

Yttria stabilized zirconia (YSZ)
 SOFC; Electrolyte; Sub-micrometer grain (Han, M. (165) 757)

Zinc electrochemistry
 Polymer electrolyte; Zinc ion conductor; Oligomeric polyether; Organic carbonate (Ye, H. (165) 500)

Zinc ion conductor
 Polymer electrolyte; Zinc electrochemistry; Oligomeric polyether; Organic carbonate (Ye, H. (165) 500)

Zinc regeneration
 Zinc–air; Fuel cell; UPS (Smedley, S.I. (165) 897)

Zinc–air
 Fuel cell; UPS; Zinc regeneration (Smedley, S.I. (165) 897)

Zn/Ni secondary cells
 ZnO ; Surface modification; $Sn_6O_4(OH)_4$ (Yuan, Y.F. (165) 905)

ZnO
 Surface modification; $Sn_6O_4(OH)_4$; Zn/Ni secondary cells (Yuan, Y.F. (165) 905)